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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,623	03/08/2002	Taku Ishizawa	Q68827	9401

7590

06/10/2003

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3213

EXAMINER

VO, ANH T N

ART UNIT

PAPER NUMBER

2861

DATE MAILED: 06/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
10/092,623

Applicant(s)
ISHIZAWA ET AL.

Examiner
Anh T. N. Vo

Art Unit
2861



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed on 4/14/2003
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-31 and 43-46 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-31 and 43-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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Continued Prosecution Application

The request filed on 05/14/2003 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 10/092,623 is acceptable and a CPA has been established. An action on the CPA follows.

Drawings Object to

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the recitation "said press member is separate from said cartridge case" on line 6 in claims 24 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Rejections

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

AV ²⁴
Claim ~~1~~ is rejected under 35 U.S.C. 102 (b) as being anticipated by Hamlin (US 4,935,751).

Hamblin discloses in Figures 1-5 an ink cartridge for use in an ink jet printer

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comprising:

- an ink pack (23) of flexible material storing ink therein;
- a cartridge case (3) which houses the ink pack (23) and constitutes an outer shell; and
- an ink pack press member (19) which is housed in the cartridge case (3) along with the ink pack (23) and which adjusts the volume of ink to be filled into the ink pack (23) in accordance with the volume of the press member (19), wherein said press member is separate from said cartridge case (3) (Figures 2-5).

AV ²⁴ Claims ~~1~~ and 43-44 are rejected under 35 U.S.C. 102 (b) as being anticipated by Miyazawa et al. (US 5,896,151).

Miyazawa et al. disclose in Figures 1- 2 and 5 an ink cartridge for use in an ink jet printer comprising:

- an ink pack (20) of flexible material storing ink therein;
- a cartridge case (1, 3) which houses the ink pack (20) and constitutes an outer shell; and
- an ink pack press member (25) which is housed in the cartridge case (1, 3) along with the ink pack (20) and which adjusts the volume of ink to be filled into the ink pack (20) in accordance with the volume of the press member (25), wherein said press member (25) is separate from said cartridge case (1, 3) (Figures 1-2);
- wherein said press member (25 or 40) is selected from a plurality of available press members having respective different shapes (Figures 2 and 5); and
- wherein the cartridge case (1, 3) includes an upper case (3) and a lower case (1), and the lower case (1) has a concave recess portion (4) on which the ink pack (20) is placed (Figures 1-2).

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior arts are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24-31 are rejected under 35 USC 103 (a) as being unpatentable over Barinaga (US Pat. 6,030,074) in view of Yoshizawa et al. (JP 08230204A), Okubo et al. (US Pat. 6,106,112) and Nakazawa et al. (EP Pat. 0928694).

Barinaga discloses in Figure 1 an apparatus for delivering pressurized ink to a print head comprising:

- the cartridge case (10, 19) is hermetically formed (Figure 1);
- an ink pack (13) of flexible material storing ink (16) therein, the ink pack being housed within the outer shell (10, 19) (Figure 1);
- the case defined between the outer shell member (10, 19) and the ink pack (13) and adapted to receive the pressurized air (73) produced by the air pressurization pump when the ink cartridge is mounted to the recording apparatus (76) (Figure 1);
- wherein the cartridge case (10, 19) includes a first case (10) and a second case (19) which are served as covers (Figure 1).

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However, Barinaga does not disclose an ink cartridge comprising an ink pack press member which is housed in the cartridge case along with the ink pack and which adjusts the volume of ink to be filled into the ink pack in accordance with the volume of the press member; wherein the press member is formed from resilient material; wherein said press member is separate from said cartridge case; an edge of an opening of the first case is sealed by a film member; at least one lug-shaped member is formed on the second case; wherein a tapered surface and an engagement step section are formed on the lug-shaped member such that, when the second case is attached to the first case, a flange section formed on the edge of the first case is relatively guided by and along the tapered surface to engage with the engagement step section.

Nevertheless, Yoshizawa et al. disclose in Figures 1-4 an ink cartridge comprising:

- an ink pack press member (4a) which is housed in the cartridge case (3, 4) along with the ink pack (1) and which adjusts the volume of ink to be filled into the ink pack in accordance with the volume of the press member (4a) (Figures 1-2);
- wherein the press member (4a) is formed from resilient material (Figure 1).

Furthermore, Okubo et al. disclose in Figures 1 and 3 an ink cartridge for use in an ink jet recording apparatus comprising an ink pack press member (18u) which is housed in the cartridge case (1) along with the ink pack (22u), wherein said press member (18u) is separate from said cartridge case (1).

Additional, Nakazawa et al. disclose in Figures 1 and 3 an ink cartridge comprising:

- an edge of an opening (47) of the first case (40) is sealed by a film member (56);
- at least one lug-shaped member (55) is formed on the second case (50);

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- wherein a tapered surface (55) and an engagement step section are formed on the lug-shaped member such that, when the second case (50) is attached to the first case (40), a flange section (46) formed on the edge of the first case (40) is relatively guided by and along the tapered surface to engage with the engagement step section.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the teaching of Yoshizawa et al, Okubo et al. and Nakazawa et al. in the Barinaga ink jet recording apparatus for the purpose of providing ribs on a surface of an ink cartridge case to prevent the damage due to vibration or impact during transport.

Claims 45-46 are rejected under 35 USC 103 (a) as being unpatentable over Miyazawa et al. (US 5,896,151) in view of Yoshizawa et al. (JP Pat. 08-230204A).

Miyazawa et al. disclose in Figures 1- 2 and 5 an ink cartridge for use in an ink jet printer comprising:

- an ink pack (20) of flexible material storing ink therein;
- a cartridge case (1, 3) which houses the ink pack (20) and constitutes an outer shell; and
- an ink pack press member (25) which is housed in the cartridge case (1, 3) along with the ink pack (20) and which adjusts the volume of ink to be filled into the ink pack (20) in accordance with the volume of the press member (25), wherein said press member (25) is separate from said cartridge case (1, 3) (Figures 1-2);
- wherein said press member (25 or 40) is selected from a plurality of available press members having respective different shapes (Figures 2 and 5); and

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- wherein the cartridge case (1, 3) includes an upper case (3) and a lower case (1), and the lower case (1) has a concave recess portion (4) on which the ink pack (20) is placed (Figures 1-2).
- wherein the ink pack press member (25) is disposed between the upper case (3) and the ink pack (20) (Figure 2).

However, Miyazawa et al. do not disclose an ink cartridge comprising the concave recessed portion which is defined by a plurality of ribs protruded from a bottom surface of the lower case.

Nevertheless, Yoshizawa et al. disclose in Figures 1-2 an ink cartridge comprising the concave recessed portion (4) which is defined by a plurality of ribs (4a) protruded from a bottom surface of the lower case (4).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the teaching of Yoshizawa et al. in the Miyazawa et al. ink cartridge for the purpose of providing ribs on a surface of an ink cartridge case to prevent the damage due to vibration or impact during transport.

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art reference (EP Pat. 0899112A2) cited in the PTO 892 form show a press member (40) which is deemed to be relevant to the present invention. This reference should be reviewed.

Response to Applicant's Arguments

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The applicant's arguments with respect to the prior art rejection have been carefully considered and have been traversed in view of the new grounds of rejection over Okubo et al., Hamblin, and Miyazawa et al. references.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (703) 305-8194. The examiner can normally be reached on Tuesday to Friday from 8:00 A.M. to 5:30 P.M..

The fax number of this Group 2861 is (703) 305-3431 or 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



ANH T.N. VO
PRIMARY EXAMINER

June 4, 2003